AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method for facilitating use of a collation element that supports a large number of characters, comprising:

receiving the collation element;

reading a primary weight value from a primary weight field within the collation element;

if the primary weight value falls within a reserved set of values, ~~reading an additional portion of~~ extending the primary weight ~~value from a secondary weight field within the collation element and a tertiary weight field within~~ field to include all bits within the collation element, wherein each different primary weight value in the extended primary weight value field identifies a different character, whereby the size of the extended primary weight field increases the number of characters that can be represented by the collation element; and

if the primary weight value is not within the reserved set of values,

reading a secondary weight value from the secondary weight field within the collation element, and

reading a tertiary weight value from the tertiary weight field within the collation element,

wherein the primary weight value identifies a character;

wherein the secondary weight value can specify an accent on the character; and

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21   wherein the tertiary weight value can specify case

22   information for the character.

1   2. (Original) The method of claim 1, wherein if the primary weight value

2   falls within a reserved set of values, the method additionally comprises:

3   setting the secondary weight value to a secondary default value; and

4   setting the tertiary weight value to a tertiary default value.

1   3. (Original) The method of claim 1, wherein the collation element adheres

2   to a structure specified in Unicode Technical Report No. 10.

1   4 (Canceled).

1   5. (Original) The method of claim 1, wherein the collation element is four

2   bytes in size, of which the primary weight field is two bytes, the secondary weight

3   field is one byte and the tertiary weight field is one byte, unless a value in the

4   primary weight field belongs to the reserved set of values, in which case the

5   primary weight field takes up all four bytes of the collation element.

1   6. (Currently amended) The method of claim 5, wherein the reserved set of

2   values for the primary weight value includes hexadecimal values 0xFFF0-

3   0xFFFF.

1   7. (Original) The method of claim 1, wherein the collation element is taken

2   from a collation weight table that is used to map characters to collation weights in

3   order to establish an ordering between strings of characters.

1   8. (Original) The method of claim 7, further comprising constructing a

2   sorting key for a string by:

3   reading each character in the string;

4   looking up a corresponding collation element for each character from the

5   collation weight table; and

6   adding the corresponding collation element for each character to the

7   sorting key.

1   9. (Original) The method of claim 8,

2   wherein the sorting key is associated with a record within a database; and

3   wherein the sorting key is used to construct a linguistic index for the

4   database.

1   10. (Currently amended) A computer-readable storage medium storing

2   instructions that when executed by a computer cause the computer to perform a

3   method for facilitating use of a collation element that supports a large number of

4   characters, the method comprising:

5   receiving the collation element;

6   reading a primary weight value from a primary weight field within the

7   collation element;

8   if the primary weight value falls within a reserved set of values, ~~reading an~~

9   ~~additional portion of~~extending the primary weight ~~value from a secondary weight~~

10   ~~field within the collation element and a tertiary weight field within~~field to include

11   all bits within the collation element, wherein each different primary weight value

12   in the extended primary weight value field identifies a different character,

13   whereby the size of the extended primary weight field increases the number of

14   characters that can be represented by the collation element; and

15   if the primary weight value is not within the reserved set of values,

16	reading a secondary weight value from the secondary
17	weight field within the collation element, and
18	reading a tertiary weight value from the tertiary weight field
19	within the collation element,
20	wherein the primary weight value identifies a character;
21	wherein the secondary weight value can specify an accent
22	on the character; and
23	wherein the tertiary weight value can specify case
24	information for the character.

1   11. (Original) The computer-readable storage medium of claim 10,

2   wherein if the primary weight value falls within a reserved set of values, the

3   method additionally comprises:

4   setting the secondary weight value to a secondary default value; and

5   setting the tertiary weight value to a tertiary default value.

1   12. (Original) The computer-readable storage medium of claim 10,

2   wherein the collation element adheres to a structure specified in Unicode

3   Technical Report No. 10.

1   13 (Canceled).

1   14. (Original) The computer-readable storage medium of claim 10,

2   wherein the collation element is four bytes in size, of which the primary weight

3   field is two bytes, the secondary weight field is one byte and the tertiary weight

4   field is one byte, unless a value in the primary weight field belongs to the reserved

5   set of values, in which case the primary weight field takes up all four bytes of the

6   collation element.

1   15. (Currently amended) The computer-readable storage medium of claim

2   14, wherein the reserved set of values for the primary weight value includes

3   hexadecimal values 0xFFF0-0xFFFF.

1   16. (Original) The computer-readable storage medium of claim 10,

2   wherein the collation element is taken from a collation weight table that is used to

3   map characters to collation weights in order to establish an ordering between

4   strings of characters.

1   17. (Original) The computer-readable storage medium of claim 16,

2   wherein the method further comprises constructing a sorting key for a string by:

3   reading each character in the string;

4   looking up a corresponding collation element for each character from the

5   collation weight table; and

6   adding the corresponding collation element for each character to the

7   sorting key.

1   18. (Original) The computer-readable storage medium of claim 17,

2   wherein the sorting key is associated with a record within a database; and

3   wherein the sorting key is used to construct a linguistic index for the

4   database.

1   19. (Currently amended) An apparatus that facilitates use of a collation

2   element that supports a large number of characters, comprising:

3   an assignment mechanism that is configured to read a primary weight

4   value from a primary weight field within the collation element;

5   wherein if the primary weight value falls within a reserved set of values,

6   the assignment mechanism is configured to ~~read an additional portion of~~extend

7 | the primary weight ~~value from a secondary weight field within the collation~~

8 | ~~element and a tertiary weight field within~~ field to include all bits within the

9 | collation element, wherein each different primary weight value in the extended

10 | primary weight value field identifies a different character, whereby the size of the

11 | extended primary weight field increases the number of characters that can be

12 | represented by the collation element; and

13 | wherein if the primary weight value is not within the reserved set of

14 | values, the assignment mechanism is configured to,

15 | read a secondary weight value from the secondary weight

16 | field within the collation element, and to

17 | read a tertiary weight value from the tertiary weight field

18 | within the collation element,

19 | wherein the primary weight value identifies a character;

20 | wherein the secondary weight value can specify an accent

21 | on the character; and

22 | wherein the tertiary weight value can specify case

23 | information for the character.

1 | 20. (Original) The apparatus of claim 19, wherein if the primary weight

2 | value falls within the reserved set of values, the assignment mechanism is

3 | configured to:

4 | set the secondary weight value to a secondary default value; and to

5 | set the tertiary weight value to a tertiary default value.

1 | 21. (Original) The apparatus of claim 19, wherein the collation element

2 | adheres to a structure specified in Unicode Technical Report No. 10.

1 | 22 (Canceled).

1   23. (Original) The apparatus of claim 19, wherein the collation element is

2   four bytes in size, of which the primary weight field is two bytes, the secondary

3   weight field is one byte and the tertiary weight field is one byte, unless a value in

4   the primary weight field belongs to the reserved set of values, in which case the

5   primary weight field takes up all four bytes of the collation element.

1   24. (Currently amended) The apparatus of claim 23, wherein the reserved

2   set of values for the primary weight value includes hexadecimal values 0xFFF0-

3   0xFFFF.

1   25. (Original) The apparatus of claim 19, wherein the collation element is

2   taken from a collation weight table that is used to map characters to collation

3   weights in order to establish an ordering between strings of characters.

1   26. (Original) The apparatus of claim 25, further comprising a key

2   construction mechanism for constructing a sorting key for a string, wherein the

3   key construction mechanism is configured to:

4   read each character in the string;

5   lookup a corresponding collation element for each character from the

6   collation weight table; and to

7   add the corresponding collation element for each character to the sorting

8   key.

1   27. (Original) The apparatus of claim 26,

2   wherein the sorting key is associated with a record within a database; and

3   wherein the sorting key is used to construct a linguistic index for the

4   database.

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